

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

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PART Env-Dw 715 DISINFECTION RESIDUALS, BYPRODUCTS, AND BYPRODUCT PRECURSORS

Statutory Authority: RSA 485:3, I(c); RSA 485:41, II & IV; 40 CFR 141 Subparts L, U, & V

Env-Dw 715.01 Purpose. The purpose of these rules is to establish procedures and standards for the control of disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors by public water system owners, as specified in 40 CFR 141 Subpart L, §§130-135, 40 CFR 141 Subpart U, §§600-605, and 40 CFR 141 Subpart V, §§620-629, which, pursuant to 40 CFR 141.1, constitute national primary drinking water requirements.

Source. #9619, eff 1-1-10

Env-Dw 715.02 Applicability. This part shall apply to:

- (a) Each community water system or non-transient non-community water system at which any chemical disinfectant, including chlorine dioxide, is added to the water in any part of the treatment process; and
- (b) Each transient non-community water system at which chlorine dioxide is added as a disinfectant or oxidant to the water in any part of the treatment process.

Source. #9619, eff 1-1-10

Env-Dw 715.03 Definitions.

- (a) “Community water system” means “community water system” as defined in RSA 485:1-a, I, as reprinted in Appendix B.
- (b) “Conventional filtration” means “conventional filtration treatment” as defined in 40 CFR 141.2, as reprinted in Appendix B.
- (c) “Haloacetic acids (five) (HAA5)” means “Haloacetic acids (five) (HAA5)” as defined in 40 CFR 141.2, as reprinted in Appendix B.
- (d) “Maximum residual disinfectant level (MRDL)” means “maximum residual disinfectant level” as defined in 40 CFR 141.2, as reprinted in Appendix B.
- (e) “Non-transient non-community water system” means “non-transient non-community water system” as defined in RSA 485:1-a, XI, as reprinted in Appendix B.
- (f) “Public water system (PWS)” means “public water system” as defined in RSA 485:I-a, XV, as reprinted in Appendix B.
- (g) “PWS subject to this part” means a public water system that is in one of the categories listed in Env-Dw 715.02.
- (h) “Surface Water/Groundwater Under the Influence of Surface Water System (SW/GWUDISW System)” means a public water system using surface water or ground water under the direct influence of surface water as a source.
- (i) “Total trihalomethanes (TTHM)” means “Total trihalomethanes (TTHM)” as defined in Env-Ws 302.82 or successor rules in Env-Dw 100, as reprinted in Appendix B.
- (j) “Transient non-community water system” means “transient non-community water system” as defined in Env-Ws 302.83 or successor rules in Env-Dw 100, as reprinted in Appendix B.

Source. #9619, eff 1-1-10

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Env-Dw 715.04 Increasing Residual Disinfectant Levels. Notwithstanding the MRDLs specified in Env-Ws 315 or successor rules in Env-Dw 700, the owner of a PWS subject to this part may increase the distribution system residual disinfectant levels of chlorine or chloramines, but not chlorine dioxide, pursuant to 40 CFR 141.130(d).

Source. #9619, eff 1-1-10

Env-Dw 715.05 Analytical Requirements. The owner of a PWS subject to this part shall conduct analyses as specified in 40 CFR 141.131.

Source. #9619, eff 1-1-10

Env-Dw 715.06 Monitoring Requirements.

(a) The owner of a PWS subject to this part shall conduct sampling and monitoring as specified in 40 CFR 141.132 and 141.133.

(b) Multiple wells for which a disinfectant is added at multiple separate points shall be considered as one treatment plant for determining the minimum number of TTHM and HAA5 samples specified in 40 CFR 141.132, in accordance with the following criteria:

- (1) Routine monitoring at a frequency specified in 40 CFR 141.132 shall have been performed for a minimum of one year;
- (2) Running annual average results shall be less than 0.040 mg/L for TTHM and less than 0.030 mg/L for HAA5;
- (3) For overburden wells, multiple wells shall be located within the same aquifer as determined using the stratified drift aquifer mapping of the U.S. Geological Survey;
- (4) For bedrock wells, multiple wells shall be located within an area of less than 4,000 feet in radius; and
- (5) The water quality of the multiple wells shall be within the following limits:
 - a. pH within 0.5 units, using one of the analytical methods specified in 40 CFR 141.23(k);
 - b. Total hardness within 10 mg/L, as CaCO₃;
 - c. Alkalinity within 10 mg/L, as CaCO₃; and
 - d. Conductivity within 50 umhos/cm².

(c) If running annual average results for multiple wells initially considered as one treatment plant in (b), above, subsequently exceed 0.040 mg/L for TTHM or 0.030 mg/L for HAA5, each well shall then be considered as a separate treatment plant for monitoring purposes, subject to the routine and reduced monitoring frequency requirements specified in 40 CFR 141.132.

Source. #9619, eff 1-1-10

Env-Dw 715.07 Compliance Determination. The department shall determine compliance with the requirements of Env-Dw 715.06 by a PWS subject to this part as specified in 40 CFR 141.133.

Source. #9619, eff 1-1-10

Env-Dw 715.08 Reporting and Recordkeeping Requirements. The owner of a PWS subject to this shall report to the department as specified in 40 CFR 134.

Source. #9619, eff 1-1-10

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Env-Dw 715.09 Treatment Technique for Control of Disinfection Byproduct Precursors. The owner of a SW/GWUDISW system that is in one of the categories listed in Env-Dw 715.02 and that uses conventional filtration shall meet the requirements of 40 CFR 141.135.

Source. #9619, eff 1-1-10

Env-Dw 715.10 Initial Distribution System Evaluations and Stage 2 Disinfection Byproduct Requirements. The following shall comply with the requirements of 40 CFR 141.600-605 and 40 CFR 141.620-629:

(a) An owner of a community water system that uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light; and

(b) An owner of a non-transient non-community water system that serves at least 10,000 people and uses a primary or residual disinfectant other than ultraviolet light or delivers water that has been treated with a primary or residual disinfectant other than ultraviolet light.

Source. #9619, eff 1-1-10

APPENDIX A - STATUTES/REGULATIONS IMPLEMENTED

Rule Section(s)	State Statute(s) Implemented	Federal Regulation(s) Implemented
Env-Dw 715	RSA 485:3, I(c); RSA 485:41, II & IV	40 CFR 141 Subpart L (§§130-135); 40 CFR 141 Subpart U (§§600-605); 40 CFR 141 Subpart V (§§620-629)

APPENDIX B - CITED DEFINITIONS

RSA 485:1-a Definitions. – As used in this chapter, unless the context clearly indicates otherwise, the following words shall have the following meanings:

I. “Community water system” means a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents.

XI. “Non-transient non-community water system” means a system which is not a community water system and which serves the same 25 people, or more, over 6 months per year.

XV. “Public water system” means a system for the provision to the public of piped water for human consumption, if such system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year. Such term includes (1) any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system, and (2) any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Any water system which meets all of the following conditions is not a public water system:

(a) Consists only of distribution and storage facilities (and does not have any collection and treatment facilities);

(b) Obtains all of its water from, but is not owned or operated by, a public water system; and

(c) Does not sell water to any person.

NH Admin. Rules Env-Ws 302:

Env-Ws 302.82 “Total trihalomethanes (TTHM)” means the sum of the concentration in mg/L of the trihalomethane compounds trichloromethane (chloroform), dibromochloromethane, bromodichloromethane, and tribromomethane (bromoform), rounded to 2 significant figures.

Env-Ws 302.83 “Transient non-community water system (TWS)” means a non-community water system that serves at least 25 persons in a transitory setting such as a restaurant for more than 60 days each year.

40 CFR 141.2:

“Conventional filtration treatment means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.”

“Haloacetic acids (five) (HAA5)” mean the sum of the concentrations in milligrams per liter of the haloacetic acid compounds (monochloroacetic acid, dichloroacetic acid, trichloroacetic acid, monobromoacetic acid, and dibromoacetic acid), rounded to 2 significant figures after addition.”

“Maximum residual disinfectant level (MRDL)” means a level of a disinfectant added for water treatment that may not be exceeded at the consumer’s tap without an unacceptable possibility of adverse health effects.”